

Observations of Comet 1884 (Wolf) made at the Royal Observatory, Cape of Good Hope.

(Communicated by D. Gill, LL.D., F.R.S., H.M. Astronomer).

1884.	Cape Mean Time.	Comet-*			No. of Comp.	Obser- ver.	Comet a App.			Log. (p × Δ)	Comet δ App.	Log. (p × Δ)		Red. to App. Place.	Comp. Star No.
	h m s	Δα	Δδ	Δs			h m s	h m s	s		δ App.	h m s	s		
Oct. 20	8 49 36.7	-0 32.94	+0 38.9	+0 38.9	30.16	F	21 47 43.01	8.175	+8 11 1.0	9.822 _n	9.822 _n	+3.21	+28.8	1	
23	10 45 1.3	+0 51.91	+1 52.0	+1 52.0	8.6	F	21 53 8.77	8.601	+6 45 53.0	9.793 _n	9.793 _n	+3.19	+28.4	2	
24	9 18 12.4	+0 19.88	+0 26.2	+0 26.2	14.20	F	21 54 51.27	8.280	+6 20 58.5	9.803 _n	9.803 _n	+3.20	+28.2	3	
25	9 27 16.9	+0 35.23	+2 24.3	+2 24.3	16.20	F	21 56 45.52	8.406	+5 54 38.6	9.798 _n	9.798 _n	+3.19	+28.1	4	
Nov. 3	8 51 22.4	+0 38.90	+4 55.7	+4 55.7	10.8	F	22 14 54.58	8.326	+2 17 27.1	9.767 _n	9.767 _n	+3.16	+26.8	5	
4	8 57 23.1	-0 31.73	-3 31.9	-3 31.9	12.12	F	22 17 3.96	8.361	+1 55 14.9	9.763 _n	9.763 _n	+3.18	+26.7	6	
6	8 54 24.9	+0 35.08	+3 57.0	+3 57.0	14.6	F	22 21 26.87	8.365	+1 12 45.0	9.757 _n	9.757 _n	+3.16	+26.3	7	
8	8 34 19.1	+0 12.69	+3 8.0	+3 8.0	30.20	F	22 27 1.55	8.288	+0 34 2.0	9.750 _n	9.750 _n	+3.18	+26.0	8	
10	8 37 9.3	+0 46.56	-1 44.2	-1 44.2	20.16	F	22 30 27.40	8.317	-0 6 24.8	9.743 _n	9.743 _n	+3.16	+25.7	9	
12	8 30 10.3	+0 21.98	-2 53.9	-2 53.9	20.16	F		8.298		9.737 _n	9.737 _n	+3.15	+25.4	10	
17	8 30 4.2	-1 5.27	+3 15.9	+3 15.9	16.12	F		8.336		9.722 _n	9.722 _n	+3.15	+24.4	11	
18	8 35 57.6	+0 51.86	-0 13.7	-0 13.7	16.8	F	22 49 24.36	8.473	-2 21 1.2	9.721 _n	9.721 _n	+3.16	+24.3	12	
25	8 29 30.9	-1 29.69	+2 5.4	+2 5.4	10.8	F		8.382		9.702 _n	9.702 _n	+3.16	+22.9	13	
Dec. 9	8 56 6.8	+0 34.17	+6 46.1	+6 46.1	20.16	F	23 42 32.76	8.527	-5 45 42.2	9.687 _n	9.687 _n	+3.15	+20.2	14	
15	8 42 30.5	+0 36.99	-3 17.9	-3 17.9	20.16	F		8.515		9.682 _n	9.682 _n	+3.15	+19.0	15	
1885. Jan. 7	8 55 24.5	-0 33.58	+1 8.1	+1 8.1	8.12	F	0 57 2.05	8.609	-5 53 7.0	9.693 _n	9.693 _n	+0.16	- 5.2	16	
10	8 49 11.8	+0 43.91	-2 44.3	-2 44.3	7.8	F	1 4 34.79	8.607	-5 41 26.9	9.695 _n	9.695 _n	+0.15	- 5.6	17	

1885.	Cape Mean Time.		Comet- $\star$		No. of Comp.	Obser- ver.	Comet α App.		Log. ($p \times \Delta$)	Comet δ App.		Log. ($p \times \Delta$)	Red. to App. Place.	Comp. Star. No.
	h	m	s	$\Delta\delta$			h	m		δ	δ			
Jan. 12	9	1	2.7	-0 42.18	12.12	F	1	9	8.632	-5 32 47.1	9.700 _n	+0.16	6.0	18
14	9	4	2.4	+0 59.92	16.12	F	1	14	8.640	-5 23 31.9	9.703 _n	+0.16	6.3	19
15	8	53	51.8	-1 21.91	8.12	F	1	17	8.627	-5 18 27.4	9.702 _n	+0.18	6.4	20
19	8	46	6.2	+0 19.39	13.12	F	1	27	8.623	-4 57 23.9	9.704 _n	+0.18	6.9	21
20	8	54	30.0	-1 22.77	12.14	F	1	29	8.638	-4 51 48.6	9.707 _n	+0.20	7.1	22
21	8	51	39.5	+0 35.00	12.8	F	1	32	8.637	-4 46 9.1	9.708 _n	+0.18	7.2	23
Feb. 12	8	28	59.3	-0 47.51	16.8	F	2	25	8.652	-2 19 22.4	9.728 _n	+0.19	9.8	24
13	8	34	11.3	+0 43.86	16.12	F	2	27	8.660	-2 12 8.4	9.730 _n	+0.20	9.8	25
14	8	34	24.2	+0 27.67	16.12	F	2	29	8.662	-2 4 54.4	9.731 _n	+0.19	9.9	26

The comet was also observed on the Meridian on two occasions:—

1884.

Oct. 24	7	40	32.4	6.1	F	21	54	45.98	-1 6 22 52.7	9.809 _n
25	7	38	27.9	6	F	21	56	37.66		

Notes.

- Nov. 3. Comet very faint: moonlight and haze.
6. Measures frequently interrupted by cloud.
18. Only one comparison (through cloud) was obtained between stars 12 and h.

Dec. 9. Nucleus = star of 11th magnitude.

Jan. 10. Comet faint: hazy.

21. Comet very faint: moonlight: a very faint star near the comet was troublesome.

Errata.—W.B. xxii. 574. This star is Lalande 44096 and Glasgow 5876. The R.A. given in W.B. is about 20' too great.

W.B. i. 122 and 126. The differences between these two stars, measured on Jan. 12, were 21".68 and 5' 20".0. The place of the second star given in W.B. requires a correction of -2' in declination.

W.B. i. 183. Precession in R.A. for 3".018 read 3".028. W.B. i. 514. Precession in Dec. for 19".59 read 18".59.

Assumed Mean Places of Comparison Stars.

Comp. Star. No.	Mag.	α 1884 ^o .			δ 1884 ^o .			Authority.
		h	m	s	h	m	s	
1	9	21	48	12.74	+8	9	53.4	2 Obs. Cape (= W.B. xxi. 1095).
2	9 $\frac{1}{2}$	21	52	13.67	+6	43	32.6	Equat. diff. from * <i>a</i> .
<i>a</i>	9	21	50	43.10	+6	41	34.8	1 Obs. Cape (= W.B. xxi. 1150).
3	9	21	54	28.19	+6	20	4.1	Equat. diff. from * <i>b</i> .
<i>b</i>	9 $\frac{1}{2}$	21	55	6.36	+6	16	15.8	Equat. diff. from * <i>c</i> .
<i>c</i>	6	21	54	20.29	+6	9	43.1	= 18 Pegasi $\frac{1}{2}$ (Gr. '64 + Yarn.)
4	9 $\frac{1}{2}$	21	56	7.10	+5	51	46.3	Equat. diff. from * <i>d</i> .
<i>d</i>	8 $\frac{1}{2}$	21	54	57.47	+5	46	22.8	2 Obs. Cape
5	9	22	14	12.52	+2	12	4.6	2 Obs. Cape (= W.B. xxii. 247).
6	9 $\frac{1}{2}$	22	17	32.51	+1	58	20.1	Equat. diff. from * <i>e</i> .
<i>e</i>	9	22	18	54.64	+2	3	58.1	1 Obs. Cape (= W.B. xxii. 366).
7	9	22	20	48.63	+1	8	21.7	Equat. diff. from * <i>f</i> .
<i>f</i>	8 $\frac{1}{2}$	22	21	54.41	+1	3	57.9	1 Obs. Cape (= W.B. xxii. 437).
8		22	26	45.68	+0	30	28.0	<i>Astr. Nach.</i> No. 2644.
9	10 $\frac{1}{2}$	22	29	37.68	-0	5	6.3	Equat. diff. from * <i>g</i> .
<i>g</i>	8	22	28	39.98	-0	0	4.0	1 Obs. Cape (= W.B. xxii. 574).
10		22	34	41	-0	41		(= Arg. -0 ^o .4399).
11	9 $\frac{1}{2}$	22	48	(3)	-2	9		
12	10	22	48	(29.34)	-2	21	(11.8)	Equat. diff. from * <i>h</i> .
<i>h</i>	9	22	47	12.04	-2	14	40.6	W.B. xxii. 953.
13	9	23	8	(28)	-3	53		
14	8	23	41	55.44	-5	52	48.5	W.B. xxiii. 821.
15	9	23	57	(44)	-6	4		
16	10 $\frac{1}{2}$	1885 ^o .			1885 ^o .			
		0	57	35.47	-5	54	9.9	Equat. diff. from * <i>i</i> .
<i>i</i>	8	0	58	47.95	-5	26	25.9	W.B. 0, 1003.
17	9	1	3	50.73	-5	38	37.0	W.B. i. 12.
18	8 $\frac{1}{2}$	1	10	19.66	-5	33	33.4	W.B. i. 122.
19	9 $\frac{1}{2}$	1	13	38.24	-5	26	33.9	Equat. diff. from * <i>k</i> .
<i>k</i>	8 $\frac{1}{2}$	1	13	43.30	-5	31	2.0	W.B. i. 183.
20	10 $\frac{1}{2}$	1	18	28.92	-5	14	40.1	Equat. diff. from * <i>l</i> .
<i>l</i>	8 $\frac{1}{2}$	1	20	32.02	-5	16	7.5	W.B. i. 315.
21	10	1	26	42.44	-4	57	20.8	Equat. diff. from * 22.
22	9	1	30	54.34	-4	53	20.9	W.B. i. 502.
23	8	1	31	24.97	-4	43	49.2	W.B. i. 514.
24	10	2	25	59.62	-2	22	41.0	Equat. diff. from * 25.
25	9	2	26	51.10	-2	15	51.8	W.B. ii. 422.
26	10	2	29	30.97	-2	4	45.0	Equat. diff. from * <i>m</i> .
<i>m</i>	9 $\frac{1}{2}$	2	33	7.20	-2	4	56.9	W.B. ii. 537.

Observations of Comet 1885 . . . (Barnard) at Harrow with the 18½-inch Equatorial Reflector and Ring Micrometer.
By G. L. Tupman.

	Green. Mean Time.		Δα	—	Δδ	No. of Comp.	app. α		app. δ		Log. fact. Parallax.	*
	h	m s	s				h	m s	°	' 16 31 6		
1885, July 15	10	48	22.8	+ 2.55	— 7 54.3	6	17	7 25.18	— 9	16 31.6	+ 8.137	+ 9.938
	12	17	9.7	— 4.97	— 10 4.4	22	17	7 17.66	— 9	18 41.7	+ 8.444	+ 9.928
July 17	10	35	49.1	+ 31.87	— 1 2.8	24	17	4 1.24	— 10	23 14.1	+ 8.128	+ 9.942
	10	59	35.7	+ 29.93		6	17	3 59.30			+ 8.244	

The comet was very faint, the sky being hazy on both nights; some 30" or 40" diameter, with central condensation admitting of pretty accurate observation. All the transits were registered on the chronograph. The apparent places of the comet differ slightly from those published in the *Ast. Nach.*, No. 2676, the places of the stars being derived from recent observations.

Mean Places of the Comparison Stars for 1885.0.

1	h	m	s	s	+ 2.95	— 9 8 45.6	+ 8.3	Harrow Meridian Obs. 1885, 3, 3
	17	7	19.68					
2	h	m	s	s	+ 2.95	— 10 22 19.4	+ 7.9	Greenwich Obs. 1883-84, 3, 3*
	17	3	26.42					

P P

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